

RESPONSE TO OFFICE ACTION DATED 10-6-2005
SERIAL NO 10/642,903

LISTING OF CLAIMS:

1-12. (canceled)

13(Previously Presented). The gasket assembly of claim 16, characterized in that the coating has a density of below 70% of the theoretical density of the material forming the coating.

14-15. (canceled)

16(Currently Amended). A metal gasket assembly having at least one embossed sealing bead and a gasket coating applied to the at least one bead comprising: chemically exfoliated vermiculite wherein at least 90 weight percent of the vermiculite has a thickness of less than or equal to 30 microns and no dimension is greater than 1 millimeter; a high temperature organic [[resin]] binder that is heat resistant to at least 300 degrees Celsius; a supplementary inorganic [[resin]] binder; and a flaky filler.

17(Previously Presented). The gasket assembly of claim 16 wherein the exfoliated vermiculite is present in an amount from 10 to 90 percent by weight of the coating.

18(Currently Amended). The gasket assembly of claim 16 wherein the high temperature organic [[resin]] binder is a silicone or siliconate resin.

19(Currently Amended). The gasket assembly of claim 16 wherein the high temperature organic [[resin]] binder is present in an amount of from 10 to 50 percent by weight of the coating.

20(Currently Amended). The gasket assembly of claim 16 wherein the supplementary inorganic [[resin]] binder is lithium silicate.

21(Previously Presented). The gasket assembly of claim 16 wherein the flaky filler is mica, milled thermally exfoliated vermiculite, aluminum flake, or a mixture thereof.

22(Currently Amended). The gasket assembly of claim 16, wherein the amount by weight

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percent of the high temperature organic [[resin]] binder is greater than the amount by weight percent of the chemically exfoliated vermiculite in the coating.

23(Previously Presented). The gasket assembly of claim 16 wherein the coating has a thickness of less than 100 microns.

24(Previously Presented). The gasket assembly of claim 16 wherein the coating has a thickness of less than 80 microns.

25(Previously Presented). The gasket assembly of claim 16 wherein the coating has a thickness of from 50 to 75 microns.

26(Previously Presented). The gasket assembly of claim 16 further comprising a solid lubricant.

27(Currently Amended). A seal-enhancing coating for a gasket comprising a mixture of: chemically exfoliated vermiculite wherein at least 90 weight percent of the vermiculite has a thickness of less than or equal to 30 microns and no dimension is greater than 1 millimeter; a high temperature organic [[resin]] binder that is heat resistant to at least 300 degrees Celsius; a supplementary inorganic [[resin]] binder; and a flaky filler.

28(Previously Presented). The coating of claim 27 wherein the exfoliated vermiculite is present in an amount from 10 to 90 percent by weight of the coating.

29(Currently Amended). The coating of claim 27 wherein the high temperature organic [[resin]] binder is a silicone resin or silicate [[resin]].

30(Currently Amended). The coating of claim 27 wherein the high temperature organic [[resin]] binder is present in an amount of from 10 to 50 percent by weight of the coating.

31(Currently Amended). The coating of claim 27 wherein the supplementary inorganic [[resin]] binder is lithium silicate.

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32(Previously Presented). The coating of claim 27 wherein the flaky filler is mica, milled thermally exfoliated vermiculite, aluminum flake, or a mixture thereof.

33(Currently Amended). The coating of claim 27, wherein the amount by weight percent of the high temperature organic [[resin]] binder is greater than the amount by weight percent of the chemically exfoliated vermiculite in the coating.

34(Previously Presented). The coating of claim 27 further comprising a solid lubricant.

35(New). A method of forming a metal gasket, comprising:

preparing at least one metal gasket sheet having at least one opening for conveying a fluid and at least one embossment in the sheet defining a sealing ridge around the at least one opening operative to press against opposing members to be sealed to provided a primary seal around the at least one opening;

applying a seal-enhancing coating to the at least one metal gasket sheet such that the coating extends over the sealing ridge of the at least one embossment to improve the sealing characteristics of the at least one embossment by filling small cracks or fissures in the surface of the gasket and/or the member against which the gasket seals in operation, wherein the seal-enhancing coating is prepared from a mixture of chemically exfoliated vermiculite in which at least 90 percent of the vermiculite has a thickness of less than or equal to 30 microns and no dimension is greater than 1 millimeter, a high temperature organic binder that is heat resistant to at least 300 degrees Celsius, a supplementary inorganic binder, and a flaky filler.